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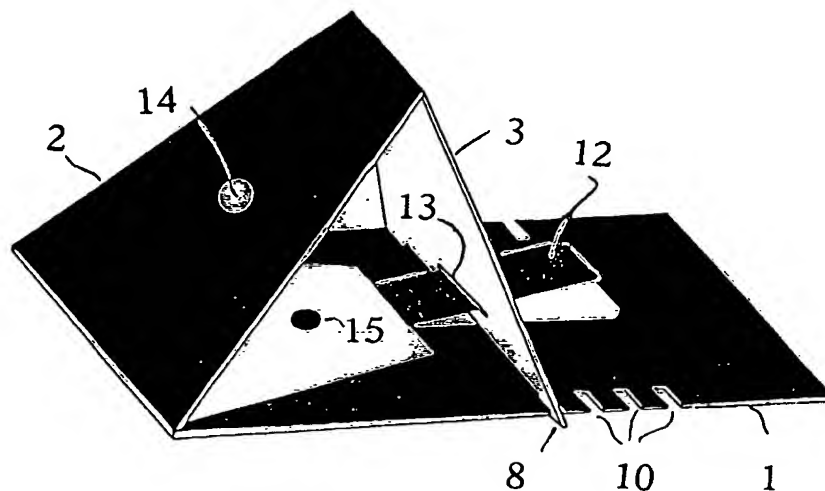
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(54) Title: GOLFING AIDS



(57) Abstract: An aid for visual detection of a golfer's head movement, constructed of card or plastics sheet, includes a black-faced sighting member (2) that has a circular aperture (14) therethrough and is hinged to a base member (1). Adjustment of the inclination of the sighting member (2) to the base member (1) brings a black disc-marking (15) line sight (L) through the aperture (14). Lugs (8) of a stay member (3) which is hinged to the sighting member (2) for setting the sighting-member inclination, are held engaged in selected notches (10) of the base member (1) by a sprung-up tongue (12); in an alternative form of aid a stay member (23) engages in transverse slots (26). Head movement is observed as apparent movement of the disc-marking (15) within the aperture (14).

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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

[001]

GOLFING AIDS

[002]

[003]

[004] The present invention relates to a golfing aids.

[005]

[006] The invention is concerned in particular with aids for assisting golfers in improvement or correction of the swing of a golf-club in teeing off or otherwise. There is general agreement in golfing that the accuracy of driving a golf ball from the tee or elsewhere is dependent on the golfer maintaining his/her head still throughout execution of the swing of the golf club. It is one of the objects of the present invention to provide a golfing aid that may be used to assist a golfer in detecting head movement during his/her swing whether in practice or play.

[007]

[008] According to one aspect of the present invention there is provided a golfing aid wherein a sighting member having an aperture therein is mounted on a base member for inclination to the base member in defining a line of sight through the aperture to a reference marking on the base member such that a golfer viewing the marking through the aperture can detect movement of his/her head by observing apparent movement of the marking within the aperture.

[009] The aperture in the sighting member may be circular, and in these circumstances, the reference marking on the base member may also be circular for alignment in the line of sight with the circular aperture of the sighting member.

[010] The marking on the base member may be of dark colour (for example black) against a visually-contrasting background. The upper surface of the sighting member, or at least such part of the surface as provides a margin to the aperture, may also be of the dark colour. In these latter circumstances, and with correct alignment of the marking with the aperture in the golfer's line of sight, the marking and the surrounds to the aperture will merge into one another visually, without any of the background to the marking showing, or with just a narrow ring of it showing

contrastingly; movement of the golfer's head will be accompanied, and readily recognised visually, by change from this condition.

[011] The sighting member, which may have the form of a regular trapezium (that is to say, a quadrilateral having a pair of parallel sides of unequal length and a pair of non-parallel sides of equal length), may be hinged to the base member such that its inclination to the base member is adjustable to allow for variation of the inclination of the line of sight. A stay member hinged to the sighting member and engageable with the base member, may be used for setting and adjusting the inclination of the sighting member.

[012]

[013] Two forms of golfing aid in accordance with the present invention will now be described, by way of example, with reference to the accompanying drawings, in which:

[014] Figure 1 is a plan view of a first form of the golfing aid according to the invention when in a collapsed, flat-sheet condition prior to its erection for use;

[015] Figure 2 is a perspective view of the golfing aid of Figure 1, erected ready for use;

[016] Figure 3 is illustrative of use of the golfing aid of Figures 1 and 2;

[017] Figure 4 is a plan view to reduced scale, of the second form of golfing aid according to the invention when in a collapsed, flat-sheet condition; and

[018] Figure 5 is a perspective view to the reduced scale, of the golfing aid of Figure 4, when erected ready for use.

[019]

[020] Referring to Figures 1 and 2, the first form of golfing aid, which is constructed in one piece of flat plastics sheet or stiff card, has three successive sections that define respectively, an elongate rectangular base member 1, a sighting member 2 hinged to the base member 1, and a stay member 3 hinged to the sighting member 2; the hinging may be by unitary hinges formed simply by bends in the sheet or card. The member 2 is of regular-trapezium form, and is hinged at its base or longer parallel-side 4 to one of the shorter sides 5 of the base member 1. This enables the

member 2 to be pivoted up out of the plane of the base member 1 for erecting the aid (as illustrated in Figure 2) with the member 2 inclined upwardly from the base member 1, so that the members 2 and 3 define respective sides of a triangle having its base defined by the member 1

[021] The stay member 3, which is also of regular-trapezium form, is used to set the inclination of the sighting member 2 in the erected aid. In this regard, the member 3 is hinged by its shorter parallel-side 6 to the shorter parallel-side 7 of the sighting member 2, and has lugs 8 that project from either end of its longer parallel-side 9 for engagement with respective notches 10 in the longer sides 11 of the base member 1. There is a series of four notches 10 spaced from one another along each side 11 to allow any of four possible settings of the inclination angle of the sighting member 2 to be selected.

[022] The lugs 8 are held in engagement with the notches 10 of the selected setting by virtue of the resilience of a tongue 12 that projects through a slot 13 in the stay member 3. The tongue 12 is cut out from the material of the base member 1 and during erection of the aid is lifted up out of the plane of the base member 1 so that it enters and then projects through the slot 13 as the stay member 3 is hinged down from the member 2. The tongue 12 exerts a spring bias on the stay member 3 urging it downwardly to hold the lugs 8 in the engaged notches 10 resiliently. The lugs 8 can be disengaged and re-engaged with different notches 10 in changing the selection of inclination angle of the sighting member 2, simply by lifting the tongue 12 with the fingers and then releasing it once the lugs 8 have been aligned with the notches 10 appropriate to the new selection.

[023] When the golfer wishes to make use of the aid of Figures 1 and 2, he/she erects it and places it, as illustrated at A in Figure 3, to one side of the ball B (the particular side depends on whether the golfer is left- or right-handed) so that when he/she addresses the ball B for a strike, the ball B lies between the aid A and the golfer. The aid A is placed on the ground with its base member 1 extending lengthwise substantially at right angles to the desired path of the ball B, and with its sighting member 2 sloping upwardly away from the golfer. The golfer in taking up his/her stance over the ball B, ready to execute swing of the golf-club C, looks towards a circular aperture 14 in the sighting member 2. More particularly, the golfer

holds a small disc or dot marking 15 on the base member 1 in his/her line of sight L through the aperture 14. It may be necessary, depending on the height of the golfer, his/her stance and the spacing of the aid A from him/her, to adjust the inclination of the sighting member 2 and/or the spacing, to facilitate this.

[024] Once the golfer has a settled stance, his/her objective should be to maintain the marking 15 centrally of the aperture 14 during movement of the club C both backwards and forwards, and in this way to maintain his/her head still throughout the whole of the swing. Assistance to the golfer in achieving this objective, and more especially in detecting any deviation from it during the swing (for immediate correction and/or subsequent remedial practice), is realised by he/she observing whether there is any apparent movement of the marking 15 within the aperture 14 during the swing. Such movement signifies movement of the golfer's head, and the direction of it indicates the direction of the head movement.

[025] Detection of apparent movement of the marking 15 within the aperture 14 is facilitated by visual contrast in that the marking 15 is (in this example) black on a white background, and the upper surface of the sighting member 2 exposed to the golfer is of the same colour, black. When the marking 15 is correctly aligned with the aperture 14 in the golfer's line of sight L, there will be either none of the white background showing within the aperture 14, or, depending upon the spacing of the aid A from the golfer, just a narrow ring of it encircling the disc-marking 15. Movement of the golfer's head from this condition will accordingly be accompanied by the appearance of, or an increase in, a showing of white in his/her line of sight L through the aperture 14. The amount and sense of the visual change are indicative of the extent and direction of head movement.

[026] The aid A may take the alternative, second form illustrated in Figures 4 and 5. As with the first form of Figures 1 and 2, the second form is constructed of flat plastics sheet or stiff card, but with, in this case, a base member 21, a sighting member 22 hinged to it, and a stay member 23 hinged to the sighting member 22, each configured (with curvilinear outline) differently from the respective member 1 to 3 of the first form of aid. More especially in this regard, the base member 21 has a head portion 24 with a rearwardly-extending tail portion 25. The tail portion 25 has a series of ten parallel, transverse slots or notches 26 any one of which is

engageable by the free end of the stay member 23 in setting the inclination of the sighting member 22.

[027] The second form of aid when erected, is used in the same way as the aid described with reference to Figures 1 and 2. In this respect, a circular aperture 27 in the sighting member 22 is used for viewing a disc or dot marking 28 on the base member 21. The marking 28 is black on a visually-contrasting, white area 29 of the head portion 24, and the upper surface of the member 22 is also black. Accordingly, while the golfer holds the marking 28 in his/her line of sight through the aperture 27, his/her head will remain stationary. Movement of the golfer's head, however, results in a readily-detectable apparent-movement of the marking 28 within the aperture 27 corresponding to the head-movement.

[028] The golfing aid of the present invention is of simple construction enabling it to be produced economically. Moreover, the hinged form of construction adopted for the golfing aids of Figures 1 and 2 and Figures 4 and 5, enables them to be collapsed to a compact configuration for carrying and storage, and to be readily erected to a sturdy triangular configuration for use.

[029] In one realisation of the aid of Figures 4 and 5, constructed of white card having one face coloured black and a thickness of 1 mm, the base member 21 has a length of 160 mm, and a maximum width of 90 mm at its hinging with the sighting member 22. The sighting member 22 (of length 80 mm) and the stay member 23 (of length 75 mm) fold down flat onto the base member 21 about this hinging. The base member 21 is a back-to-back laminate of the card with the top layer cut out to provide the notches 26 and white area 29, so that with the single-thickness sighting member 22 and stay member 23 folded down flat onto the base member 21, the overall dimensions of the collapsed aid are: length 160 mm, width 90 mm and thickness 3 mm.

[030] The golfing aid of Figures 1 and 2 may be realised in a manner corresponding to that described above for the aid of Figures 4 and 5, with the same dimensioning and using the same principles of construction.

Claims:

1. A golfing aid wherein a sighting member having an aperture therein is mounted on a base member for inclination to the base member in defining a line of sight through the aperture to a reference marking on the base member such that a golfer viewing the marking through the aperture can detect movement of his/her head by observing apparent movement of the marking within the aperture.
2. A golfing aid according to Claim 1 wherein the aperture is a circular aperture in the sighting member.
3. A golfing aid according to Claim 2 wherein the reference marking is a circular marking on the base member for alignment in the line of sight with the circular aperture in the sighting member.
4. A golfing aid according to any one of Claims 1 to 3 wherein the marking on the base member is of dark colour against a visually-contrasting background, and at least the margin to the aperture on the upper surface of the sighting member is of the dark colour.
5. A golfing aid according to Claim 4 wherein the dark colour is black.
6. A golfing aid according to any one of Claims 1 to 5 wherein the base member and the sighting member are each of card or flat plastics sheet.
7. A golfing aid according to any one of Claims 1 to 6 wherein the inclination of the sighting member to the base member is selectively adjustable for varying the inclination of the line of sight.
8. A golfing aid according to Claim 7 wherein the sighting member is hinged to the base member.

9. A golfing aid according to Claim 8 wherein a stay member that is hinged to the sighting member is engageable with the base member for setting the inclination of the sighting member relative to the base, variation of the location on the base member of such engagement varying the inclination of the sighting member.

10. A golfing aid according to Claim 9 which has collapsed and erect conditions, wherein the base member, the sighting member and the stay member are hinged together as three successive sections, in that order, to have the form of an elongate, flat sheet in the collapsed condition, and wherein, in the erect condition, the sighting member and the stay member define respective sides of a triangle having its base defined by the base member.

11. A golfing aid according to Claim 9 or Claim 10 including means for applying a resilient bias urging the stay member into engagement as aforesaid with the base member.

12. A golfing aid according to any one of Claims 9 to 11 wherein the stay member is selectively engageable with different ones of a series of notches in the base member, for setting different angles of inclination of the sighting member relative to the base member.

13. A golfing aid according to Claim 12 wherein the base member is of elongate form, there are two series of notches spaced apart from one another transversely of the base member with the notches of each series spaced from one another at intervals lengthwise of the base member, and the stay member has projecting lugs for engagement respectively with notches of the two series in setting the inclination of the sighting member.

14. A golfing aid according to Claim 12 wherein the notches are a series of parallel, transverse notches of the base member, and the stay member engages within one or other of these notches in setting the inclination of the sighting member.

ABSTRACT

An aid for visual detection of a golfer's head movement, constructed of card or plastics sheet, includes a black-faced sighting member (2) that has a circular aperture (14) therethrough and is hinged to a base member (1). Adjustment of the inclination of the sighting member (2) to the base member (1) brings a black disc-marking (15) of a white area of the base member (1) into the golfer's line of sight (L) through the aperture (14). Lugs (8) of a stay member (3) which is hinged to the sighting member (2) for setting the sighting-member inclination, are held engaged in selected notches (10) of the base member (1) by a sprung-up tongue (12); in an alternative form of aid a stay member (23) engages in transverse slots (26). Head movement is observed as apparent movement of the disc-marking (15) within the aperture (14).